



## NCDOT Prioritization 3.0 Project Summary

**SPOT ID:** H090163-B

**Mode:** Highway

**Status:** Submitted

### US-321, US-421

**From/Cross Street:** US 321-US 421 Junction Near Vilas

**Specific Improvement Type:** 1 - Widen Existing Roadway

**To:** Proposed Boone Bypass (U-2703)

**Project Category:** Statewide Mobility

**Length:** 3.55

**TIP#:** R-2615B

**Fully Funded in Draft STIP?** No

**Cost to NCDOT:** \$58,383,000

#### Description:

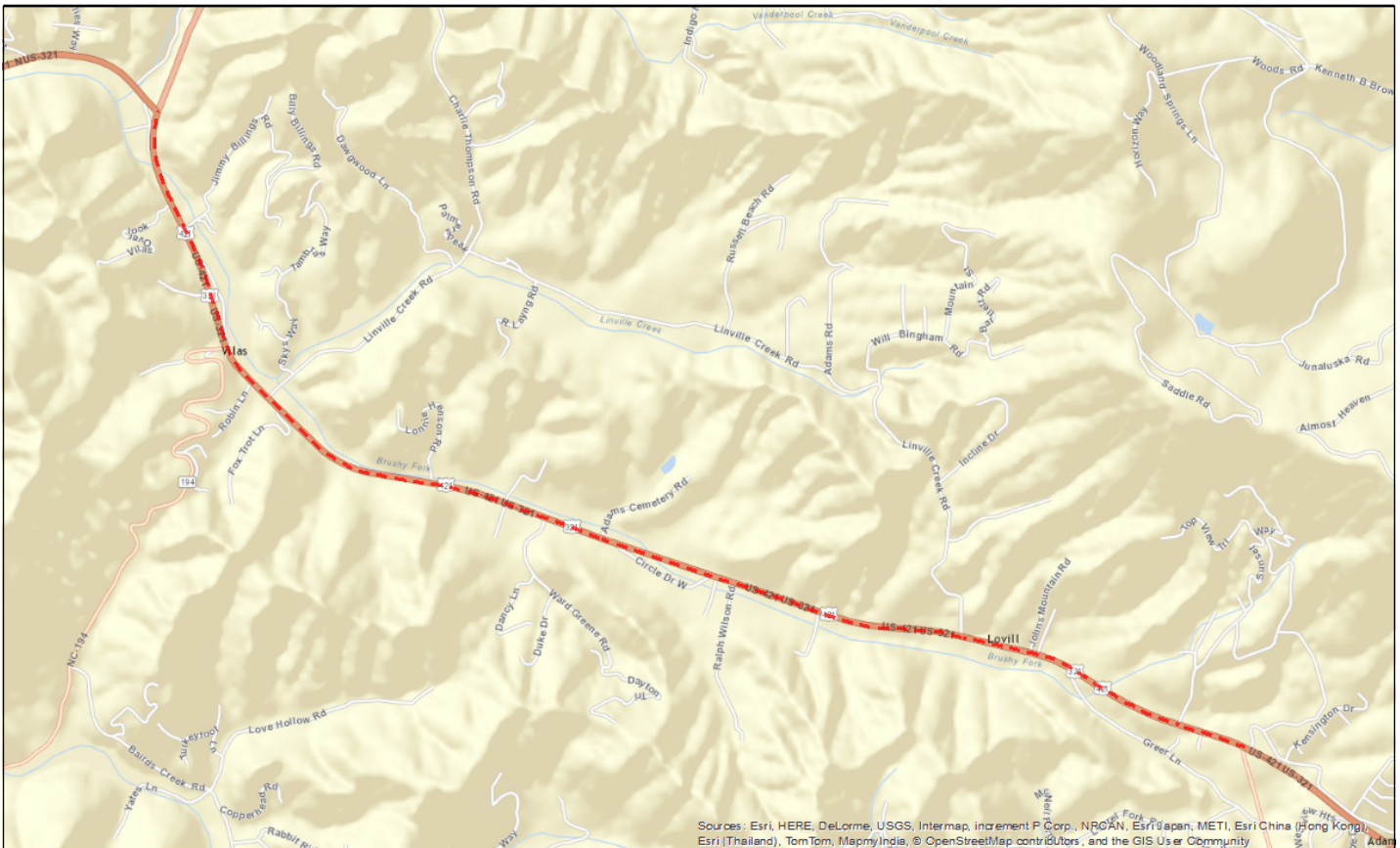
US 321-421 Junction near Vilas to Proposed Boone Bypass (U-2703). Widen to Multi-Lanes

**Division(s):** Division 11

**County(s):** WATAUGA

**MPOS(s)/RPO(s):** High Country RPO

### Project Location



**Statewide Mobility Total Score: 29.93**

<b>Quantitative Score</b>	<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (30%) 59.87 Safety (10%) 59.12 Economic Competitiveness (10%) 41.11 Multimodal + [Freight & Military] (20%) 3.81 [Travel Time] Benefit/Cost (30%) 3.97	N/A	N/A
<b>Totals: Weight: 100% Weighted Score: 29.93</b>		

**Regional Impact Total Score: 55.17**

<b>Quantitative Score</b>	<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (25%) 59.87 Safety (10%) 59.12 [Travel Time] Benefit/Cost (25%) 3.97 Accessibility / Connectivity (10%) 33.04	Percent: 15% Points: 100	Percent: 15% Points: 100
<b>Totals: Weight: 70% Weighted Score: 25.17</b>		

**Division Needs Total Score: 43.68**

<b>Quantitative Score</b>	<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (20%) 59.87 Safety (10%) 59.12 [Travel Time] Benefit/Cost (20%) 3.97	Percent: 25% Points: 0	Percent: 25% Points: 100
<b>Totals: Weight: 50% Weighted Score: 18.68</b>		

**Project Data \*****Existing Conditions**

Existing Cross-Section:	
Speed Limit:	49
Length (miles):	3.55
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Other Principal Arterial
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	0
Roadway has Curb & Gutter?	No
Volume (AADT):	14159.41
Capacity:	15672.99
Volume/Capacity Ratio:	0.9
% Autos:	95%
% Trucks:	5%
Truck Volume:	761.11
Crash Density:	76.4
Crash Severity:	52.64
Critical Crash Rate:	48.33
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	16
Existing Median Type (for Cost Estimation):	Undivided
Pavement Condition Rating:	69
Actual Congested Speed:	42.22
Travel Time Index:	1

**Project Benefits**

Project Cross-Section:	4A - 4 Lane Divided (46' Depressed Median) with Paved Shoulders
Speed Limit:	50
Length (miles):	3.55
Facility Type:	Multi-Lane Highway
Access Control:	Partial
Functional Classification:	Other Principal Arterial
Terrain Type:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	4
Travel Time Savings for 30 Years (Total):	10295153.27
Travel Time Savings for 30 Years (Autos):	9741758.45
Travel Time Savings for 30 Years (Trucks):	553394.82
Long-Term Employment:	169
% Change in Economy:	0.00065329
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	Yes
In CTP or LRTP?	No
CTP/LRTP Name:	
CTP/LRTP Completion Year:	
Submitted by:	Division 11

\* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!line tool and associated databases.

**Project Ownership****Division**

<b>Division</b>	<b>Percent</b>	<b>Regional Impact</b>	<b>Division Needs</b>
Division 11	100%	100	0
	0%	0	0
	0%	0	0
<b>TOTAL Division Points</b>		<b>100</b>	<b>0</b>

**MPO/RPO**

<b>MPO/RPO</b>	<b>Percent</b>	<b>Regional Impact</b>	<b>Division Needs</b>
High Country RPO	100%	100	100
	0%	0	0
	0%	0	0
<b>TOTAL MPO/RPO Points</b>		<b>100</b>	<b>100</b>

**Project Cost and Source**

Construction Cost:	\$28,728,000	TIP Unit
Right-of-Way Cost:	\$26,478,000	Cost Estimation Tool
Utilities Cost:	\$3,177,000	Cost Estimation Tool
Total Project Cost:	\$58,383,000	
Other Funding:	\$0	None
<b>Cost to NCDOT :</b>	<b>\$58,383,000</b>	